FORM PTO-1390 U.S. Department of Commerce Patent and Trademark Office Attorney's Docket No. TRANSMITTAL LETTER TO THE UNITED STATES 2923-707 DESIGNATED/ELECTED OFFICE (DO/EO/US) U.S. Application No. (if known) **CONCERNING A FILING UNDER 35 U.S.C. 371** INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED PCT/EP2003/014344 12/16/02; 12/20/02; 12/30/02 December 16, 2003 TITLE OF INVENTION PROTEINS INVOLVED IN THE REGULATION OF ENERGY HOMEOSTASIS APPLICANT(S) FOR DO/EO/US Martin MEISE, Karsten EULENBERG, Andreas MOLITOR, Arnd STEUERNAGEL, Tri NGUYEN, Yvonne KATTERLE Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: [X] This is a FIRST submission of items concerning a filing under 35 U.S.C. 371 2.] This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. [X] This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. [] The US has been elected (Article 31). [X] A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. [] is attached hereto (required only if not communicated by the International Bureau). b. [X] has been communicated by the International Bureau. c. [] is not required, as the application was filed in the United States Receiving Office (RO/US) 6. [] An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a. [] is attached hereto. b. [] has been previously submitted under 35 U.S.C. 154(d)(4). 7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau).] have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). [X] An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). ITEMS 11. TO 20. below concern other document(s) or information included: 11. [X] An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. [X] An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. [X] A preliminary amendment. 14. [X] An Application Data Sheet under 37 CFR 1.76. 15. A substitute specification. 16. [X] A power of attorney and/or change of address letter. (4 Sheets) 17. [X] A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825 A second copy of the published international application under 35 U.S.C. 154(d)(4). A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 20. [X] Other items or information: Statement under 37 CFR 1.821(f) RO/101, ISA/210(ISR), Published Application WO/ 204/054601A2

INTERNATIONAL APPLICATION NO. ATTORNEY DOCKET NO. PCT/EP2003/014344 2923-707 CALCULATIONS PTO USE ONLY The following fees are submitted: Basic national Fee\$300.00 300 \mathbf{x} Examination Fee If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4) \$100.00 \$ 200 х 23. Search Fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Search Authority\$100.00
International Search Report prepared and provided to the Office.....\$400.00 \$ 400 All other situations. TOTAL OF 21, 22 AND 23 = 900 Additional fee for specification and drawings filed in paper over 100 (excluding sequence listing or computer program listing filed in an electronic medium). \$ The fee is \$250.00 for each additional 50 sheets of paper or fraction thereof. **Total Sheets** Extra Sheets Number of each additional 50 or fraction thereof Rate 250 - 100 = / 50 = x 250 Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)) Number Claims Number Extra Rate Filed **Total Claims** 35 -20 = 15 X \$50.00 750 X \$200.00 \$ 200 Independent Claims - 3 ≃ 1 + \$360.00 Multiple dependent claim(s) (if applicable) O TOTAL OF ABOVE CALCULATIONS = \$ 2,100 Applicant claims small entity status. The fees indicated above are reduced by 1/2. \$1,050 SUBTOTAL = \$1,050 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)). **TOTAL NATIONAL FEE =** \$1,050 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property TOTAL FEES ENCLOSED = \$1,090 \$ Amount to be refunded \$ Amount to be charged A check in the amount of \$__ _ to cover the above fees is enclosed. Please charge my Deposit Account No. 02-2135 in the amount of \$___1,050 b. to cover the above fees. A duplicate copy of this sheet is enclosed. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 02-2135. A duplicate copy of this sheet is enclosed. NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive)(37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status. SEND ALL CORRESPONDENCE TO: Signature Customer No. 06449 Robert B. Murray Name Rothwell, Figg, Ernst & Manbeck 1425 K St., N.W. 22.980 Washington, D.C. 20005 Registration Number Phone: 202/783-6040